

# Pre-1 Worksheet (2 pages)

Simplify each radical expression. Put answer in EXACT ANSWER FORM.

1.  $\sqrt{125n}$

2.  $\sqrt{216v}$

3.  $\sqrt{512k^2}$

4.  $\sqrt{100v^3}$

5.  $\sqrt{147m^3n^3}$

6.  $\sqrt{384x^4y^3}$

7.  $\sqrt{8p^4q^3r}$

8.  $\sqrt{48a^3b^4c^6}$

9.  $\sqrt{75mn^5p^3q^5r^9}$

10.  $\sqrt{75a^7b^4cd^9}$

Perform the Indicated Operation by memory.

11.  $\sqrt{81}$

12.  $10^2$

13.  $(-3)^3$

14.  $\sqrt{121}$

15.  $12^2$

16.  $(7)^3$

17.  $\sqrt{49}$

18.  $\sqrt[3]{8}$

19.  $(-2)^3$

20.  $\sqrt[3]{-125}$

21.  $(-5)^2$

22.  $\sqrt{36}$

23.  $2^2$

24.  $\sqrt{9}$

25.  $\sqrt[3]{-27}$

*Simplify each expression.*

26.  $\sqrt{4x^2(x-3)^2}$

27.  $\sqrt[3]{-8x^6(2x-1)^3(x+3)^6}$     28.  $\sqrt[3]{27(2x+7)^5(x-3)^2}$

29.  $\sqrt[3]{54x^4y^6z}$

30.  $\sqrt{18x^3y^5z^9}$

31.  $\sqrt{72x^5(x+2)(x-1)}$

32.  $3\sqrt{16x^4y^4z}$

33.  $2\sqrt{8p^3q^6r^3}$

34.  $-2\sqrt[3]{-8a^3b^6c^9}$

*Bonus:*

*Simplify.*

$$\sqrt{\sqrt{x} + \sqrt{y}}$$